WEST

Help | Logout | Interrupt

Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences | Cases

Search Results -

Terms	Documents
L2 same photonic	0

Database: US Patents Full-Text Database
US Pre-Grant Publication Full-Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L7

Refine Search

Recall Text | Clear

Search History

DATE: Thursday, September 25, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT; PLUR=YES; OP=OR			
L7	L2 same photonic	0	L7
L6	L2 same electronic	2	L6
L5	L2 same stimulus	0	L5
L4	L1 same stimulus	0	L4
L3	L2 same electronic same photonic	0	L3
L2	sequence near0 specific near0 hybridization	1294	L2
L1	6265170	4	L1

END OF SEARCH HISTORY

FILE 'MEDLINE' ENTERED AT 13:46:26 ON 25 SEP 2003

FILE 'BIOSIS' ENTERED AT 13:46:26 ON 25 SEP 2003
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'CAPLUS' ENTERED AT 13:46:26 ON 25 SEP 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 13:46:26 ON 25 SEP 2003
COPYRIGHT (C) 2003 Elsevier Inc. All rights reserved.

=> s sequence(w)specific(w)hybridization
L1 136 SEQUENCE(W) SPECIFIC(W) HYBRIDIZATION

=> s l1 (p)electronic
L2 3 L1 (P) ELECTRONIC

=> s l1 (p)photonic
L3 0 L1 (P) PHOTONIC

=> d bib ab l2

L2 ANSWER 1 OF 3 MEDLINE on STN
AN 2001410402 MEDLINE
DN 21234633 PubMed ID: 11333303
TI Electronic detection of nucleic acids: a versatile platform for molecular diagnostics.
AU Umek R M; Lin S W; Vielmetter J; Terbrueggen R H; Irvine B; Yu C J; Kayyem J F; Yowanto H; Blackburn G F; Farkas D H; Chen Y P
CS Clinical Micro Sensors Division of Motorola, Inc., Pasadena, California 91105, USA.
SO JOURNAL OF MOLECULAR DIAGNOSTICS, (2001 May) 3 (2) 74-84.
Journal code: 100893612. ISSN: 1525-1578.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200107
ED Entered STN: 20010723
Last Updated on STN: 20010723
Entered Medline: 20010719
AB A novel platform for the **electronic** detection of nucleic acids on microarrays is introduced and shown to perform well as a selective detection system for applications in molecular diagnostics. A gold electrode in a printed circuit board is coated with a self-assembled monolayer (SAM) containing DNA capture probes. Unlabeled nucleic acid targets are immobilized on the surface of the SAM through **sequence -specific hybridization** with the DNA capture probe. A separate signaling probe, containing ferrocene-modified nucleotides and complementary to the target in the region adjoining the capture probe binding site, is held in close proximity to the SAM in a sandwich complex. The SAM allows electron transfer between the immobilized ferrocenes and the gold, while insulating the electrode from soluble redox species, including unbound signaling probes. Here, we demonstrate sequence-specific detection of amplicons after simple dilution of the reaction product into hybridization buffer. In addition, single nucleotide polymorphism discrimination is shown. A genotyping chip for the C282Y single nucleotide polymorphism associated with hereditary hemochromatosis is used to confirm the genotype of six patients' DNA. In addition, a gene expression-monitoring chip is described that surveys five genes that are differentially regulated in the cellular apoptosis

response. Finally, custom modification of individual electrodes through **sequence-specific hybridization** demonstrates the potential of this system for infectious disease diagnostics. The versatility of the **electronic** detection platform makes it suitable for multiple applications in diagnostics and pharmacogenetics.

=>